PROVIDING MORE EPCOR

Gold Bar Wastewater Treatment Plant
Plant Performance Report
February 2018

Digested Sludge: Total Monthly Volume (ML)	59.26

Volume of Flow (ML)

DATE	Peak Flow (MLD)	Influent RAW	Effluent Non UV Disinfected OUTFALL 30	Effluent Non UV Disinfected MPW	Effluent Non UV Disinfected OUTFALL 20	Effluent UV Disinfected EPEPS	Effluent UV Disinfected OUTFALL 10 FEC	Effluent UV Disinfected OUTFALL 10 FE
Thu 01	340.78	236.68	0.00	10.79	0.00	0.00	225.89	225.89
Fri 02	308.79	235.86	0.00	10.41	0.00	0.00	225.45	225.45
Sat 03	317.17	232.91	0.00	9.95	0.00	0.00	222.96	222.96
Sun 04	368.66	239.61	0.00	10.45	0.00	0.00	229.16	229.16
Mon 05	317.37	240.69	0.00	10.65	0.00	0.00	230.04	230.04
Tue 06	309.14	241.08	0.00	9.70	0.00	0.00	231.38	231.38
Wed 07	306.83	237.04	0.00	10.27	0.00	0.00	226.77	226.77
Thu 08	309.20	238.47	0.00	11.02	0.00	0.00	227.45	227.45
Fri 09	310.90	236.93	0.00	10.18	0.00	0.00	226.75	226.75
Sat 10	323.07	234.59	0.00	10.43	0.00	0.00	224.16	224.16
Sun 11	339.79	235.72	0.00	11.05	0.00	0.00	224.67	224.67
Mon 12	354.95	242.09	0.00	10.31	0.00	0.00	231.78	231.78
Tue 13	362.39	248.65	0.00	10.87	0.00	0.00	237.78	237.78
Wed 14	343.48	241.21	0.00	9.36	0.00	0.00	231.85	231.85
Thu 15	365.09	252.29	0.00	8.13	0.00	0.00	244.16	244.16
Fri 16	335.97	245.80	0.00	8.63	0.00	0.00	237.17	237.17
Sat 17	353.38	237.15	0.00	10.95	0.00	0.00	226.20	226.20
Sun 18	314.72	235.25	0.00	10.93	0.00	0.00	224.32	224.32
Mon 19	338.96	239.60	0.00	9.89	0.00	0.00	229.71	229.71
Tue 20	321.55	242.11	0.00	10.12	0.00	0.00	231.99	231.99
Wed 21	322.78	241.54	0.00	10.39	0.00	0.00	231.15	231.15
Thu 22	324.13	242.70	0.00	10.52	0.00	0.00	232.18	232.18
Fri 23	321.88	240.48	0.00	10.58	0.00	0.00	229.90	229.90
Sat 24	316.56	237.11	0.00	10.50	0.00	0.00	226.61	226.61
Sun 25	358.76	240.59	0.00	10.47	0.00	0.00	230.12	230.12
Mon 26	372.87	249.12	0.00	10.72	0.00	0.00	238.40	238.40
Tue 27	324.87	248.81	0.00	10.74	0.00	0.00	238.07	238.07
Wed 28	340.76	257.75	0.00	11.57	0.00	0.00	246.18	246.18
Average	333.03	241.14	0.00	10.34	0.00	0.00	230.79	230.79
Minimum	306.83	232.91	0.00	8.13	0.00	0.00	222.96	222.96
Maximum	372.87	257.75	0.00	11.57	0.00	0.00	246.18	246.18
GeoMean	---	---	---	---	---	---	---	---
TOTAL	---	6,752	0	290	0.00	0	6,462	6,462

Liquid Stream Quality

DATE	pH@25°C RAW	pH@25°C OUTFALL 30	pH@25°C OUTFALL 20	pH@25°C OUTFALL 10 FEC	TSS (mg/L) RAW	TSS OUTFALL 30	TSS OUTFALL 20	TSS EPEPS	TSS OUTFALL 10 FEC	TSS OUTFALL 10 FE
Thu 01	7.6			7.4	324				5.8	5.8
Fri 02	7.6			7.5	360				5.6	5.6
Sat 03	7.6			7.5	288				5.3	5.3
Sun 04	7.5			7.3	280				5.9	5.9
Mon 05	7.6			7.4	324				6.7	6.7
Tue 06	7.5			7.4	420				6.3	6.3
Wed 07	7.7			7.4	308				6.3	6.3
Thu 08	7.7			7.4	348				6.4	6.4
Fri 09	7.9			7.3	306				6.2	6.2
Sat 10	7.6			7.3	288				6.5	6.5
Sun 11	7.8			7.5	270				7.0	7.0
Mon 12	7.8			7.3	324				27.6	27.6
Tue 13	7.6			7.3	344				27.6	27.6
Wed 14	7.5			7.3	274				6.6	6.6
Thu 15	7.6			7.3	240				17.1	17.1
Fri 16	7.6			7.4	348				8.4	8.4
Sat 17	7.5			7.3	348				8.4	8.4
Sun 18	7.7			7.4	296				7.5	7.5
Mon 19	7.6			7.4	340				21.4	21.4
Tue 20	7.5			7.4	304				14.9	14.9
Wed 21	7.6			7.3	308				11.4	11.4
Thu 22	7.6			7.4	306				21.7	21.7
Fri 23	7.6			7.4	324				8.6	8.6
Sat 24	7.7			7.5	356				6.8	6.8
Sun 25	7.7			7.4	396				6.9	6.9
Mon 26	7.6			7.5	368				7.9	7.9
Tue 27	7.6			7.5	340				6.2	6.2
Wed 28	7.5			7.3	269				4.4	4.4
Average	7.6	---	---	7.4	321	---	---	---	10.1	10.1
Minimum	7.5	---	---	7.3	240	---	---	---	4.4	4.4
Maximum	7.9	---	---	7.5	420	---	---	---	27.6	27.6
GeoMean	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---

DATE	BOD_5/$cBOD_5$ (mg/L) RAW BOD_5	BOD OUTFALL 30	BOD OUTFALL 20	BOD EPEPS	cBOD OUTFALL 10 FEC	cBOD OUTFALL 10 FE	TP (mg/L) RAW	TP OUTFALL 30	TP OUTFALL 20	TP EPEPS	TP OUTFALL 10 FEC	TP OUTFALL 10 FE
Thu 01	358				4	4	8.57				0.32	0.32
Fri 02	327				6	6	8.88				0.31	0.31
Sat 03	336				4	4	8.23				0.31	0.31
Sun 04	332				5	5	7.68				0.32	0.32
Mon 05	323				4	4	7.69				0.34	0.34
Tue 06	365				3	3	7.97				0.34	0.34
Wed 07	384				4	4	8.39				0.35	0.35
Thu 08	545				3	3	7.26				0.35	0.35
Fri 09	331				4	4	7.40				0.34	0.34
Sat 10	330				3	3	8.22				0.33	0.33
Sun 11	322				3	3	7.48				0.38	0.38
Mon 12	377				7	7	7.73				1.00	1.00
Tue 13	306				7	7	7.04				1.10	1.10
Wed 14	305				3	3	6.56				0.36	0.36
Thu 15	328				5	5	6.80				0.73	0.73
Fri 16	343				4	4	7.63				0.36	0.36
Sat 17	301				4	4	6.57				0.31	0.31
Sun 18	301				4	4	6.26				0.38	0.38
Mon 19	356				9	9	7.72				0.82	0.82
Tue 20	352				7	7	7.15				0.52	0.52
Wed 21	334				6	6	7.52				0.65	0.65
Thu 22	271				7	7	7.74				0.79	0.79
Fri 23	309				6	6	7.88				0.42	0.42
Sat 24	356				5	5	8.10				0.34	0.34
Sun 25	295				5	5	8.23				0.34	0.34
Mon 26	291				5	5	7.21				0.44	0.44
Tue 27	315				3	3	7.33				0.36	0.36
Wed 28	287				3	3	6.40				0.26	0.26
Average	335	---	---	---	5	5	7.56	---	---	---	0.46	0.46
Minimum	271	---	---	---	3	3	6.26	---	---	---	0.26	0.26
Maximum	545	---	---	---	9	9	8.88	---	---	---	1.10	1.10
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---

DATE	NH3-N (mg/L) RAW	NH3-N OUTFALL 30	NH3-N OUTFALL 20	NH3-N EPEPS	NH3-N OUTFALL 10 FEC	NH3-N OUTFALL 10 FE	TKN (mg/L) RAW	TKN OUTFALL 30	TKN OUTFALL 20	TKN OUTFALL 10 FEC	NO_2+NO_3 (mg/L) RAW	NO_2+NO_3 OUTFALL 30	NO_2+NO_3 OUTFALL 20	NO_2+NO_3 OUTFALL 10 FEC	Chloride (mg/L) RAW	Chloride OUTFALL 30	Chloride OUTFALL 20	Chloride OUTFALL 10 FEC	*E. coli* (Counts/100 mL) RAW X10^6	*E. coli* OUTFALL 30 X10^6	*E. coli* OUTFALL 20 X10^6	*E. coli* OUTFALL 10 FEC
Thu 01	38.0				6.97	6.97	63.4			9.63				6.63	108			129				6
Fri 02	45.4				6.91	6.91	62.6			8.27				8.51	108			114				7
Sat 03	48.0				5.62	5.62	63.8			6.96				10.7	110			113				9
Sun 04	46.0				4.91	4.91	60.4			6.38				12.5	96.7			113				5
Mon 05	44.3				3.46	3.46	63.2			4.99				14.4	120			99.0				4
Tue 06	43.3				3.60	3.60	62.7			5.32				14.4	113			120				6
Wed 07	46.1				4.08	4.08	66.4			5.37	0.02			14.1	113			111				8
Thu 08	36.5				3.35	3.35	60.0			5.74				14.5	109			119				5
Fri 09	36.4				3.15	3.15	61.1			5.63				17.2	86.0			104				6
Sat 10	43.0				3.56	3.56	63.2			5.49				16.0	113			115				7
Sun 11	43.0				3.33	3.33	60.2			5.72				16.0	106			110				7
Mon 12	41.5				4.84	4.84	60.7			7.68				12.8	102			100				10
Tue 13	40.1				5.65	5.65	52.4			8.16				12.3	194			107				15
Wed 14	39.6				2.71	2.71	56.7			4.67	0.01			13.4	252			273				6
Thu 15	37.4				2.72	2.72	57.9			5.23				13.1	152			210				8
Fri 16	35.8				3.75	3.75	61.8			5.51				12.0	141			158				6
Sat 17	42.2				2.81	2.81	58.0			4.52				13.5	120			148				5
Sun 18	43.1				2.83	2.83	57.7			4.60				14.3	94.6			119				8
Mon 19	42.3				3.28	3.28	57.0			5.49				14.2	95.9			98.6				5
Tue 20	37.0				3.96	3.96	61.1			6.74				13.0	103			96.6				10
Wed 21	38.7				3.86	3.86	61.8			6.68	0.01			15.1	108			103				6
Thu 22	39.7				3.14	3.14	59.5			5.90				14.3	92.9			113	2.9			5
Fri 23	42.8				3.50	3.50	61.9			5.71				13.1	109			126				5
Sat 24	41.6				3.68	3.68	61.3			5.28				15.0	116			125				5
Sun 25	46.0				4.86	4.86	63.9			6.10				15.0	98.6			121				8
Mon 26	39.1				4.99	4.99	55.8			6.40				14.4	123			114	3.7			4
Tue 27	34.9				3.12	3.12	54.5			4.76				11.0	155			129				9
Wed 28	34.7				2.50	2.50	50.5			3.82	< 0.01			11.2	184			160				10
Average	40.9	---	---	---	3.97	3.97	60.0	---	---	5.96	0.01	---	---	13.3	122	---	---	127	---	---	---	---
Minimum	34.7	---	---	---	2.50	2.50	50.5	---	---	3.82	< 0.01	---	---	6.63	86.0	---	---	96.6	2.9	---	---	4
Maximum	48.0	---	---	---	6.97	6.97	66.4	---	---	9.63	0.02	---	---	17.2	252	---	---	273	3.7	---	---	15
GeoMean	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.3	---	---	7
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* contact Laboratory for information about the quality assurance associated with the result

RAW	Untreated Influent into the plant
INF	Untreated Wastewater from collection system
INFs	Influent, screened at the Headworks Diversion Structure
PE	Primary Effluent from conventional primaries
PE 30	Primary Effluent from conventional primaries discharged via Outfall 30
EPT	Enhanced Primary Treatment
EPE	Enhanced Primary Effluent
EPEP	Enhanced Primary Effluent and Pump Station
FE	Final Effluent from secondary treatment process (with biological nutrient removal). Pre-Ultraviolet disinfection

FEC	Combined pre-UV disinfection (FE+EPEPS)
OUTFALL 10	UV-disinfected, discharged via OUTFALL 10
OUTFALL 20	Combined Bypass (RAW + PE + EPE)
OUTFALL 30	Combined Bypass (INF + INFS + PE30 + EPE)
MPW	Membrane Product Water (Effluent re-use water)
ML	Megalitre (1,000,000 Litre)
MPN	Most Probable Number
NR	No Result
NS	No Sample
INS	Insufficient Sample

Enhanced Primary Treatment (EPT) Usage

Total Bypass (hrs)	EPT Usage (hrs)	% Usage	Total Bypass YTD (hrs)	EPT Usage YTD	% Usage YTD
0	0	100%	0	0	100.00%

Report Comments

1.	RAW - February 22: Analysis of this sample exceeded the recommended holding time for BOD.

AEP Ref #**

** AEP - Alberta Environment & Parks

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